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AGRICULTURE AND PRICES.¹

JOHN D. WILLARD,

MASSACHUSETTS AGRICULTURAL COLLEGE, AMHERST.

A division of the subject is obviously necessary. To discuss the entire topic would require the time allowed for a full semester's course. The student may approach the subject from the standpoint of abnormal phenomena which have appeared during the war, or from the standpoint of peace-time phenomena interrupted by the war. One observer, from the habit of agricultural thinking, expects to find that agriculture as the largest extractive industry furnishes the basis for all price phenomena. Another observer from the business world approaches the subject expecting to find that agriculture must surely reflect the prices and conditions of general business. All open-minded students must ultimately reach the conclusion that the abnormal price phenomena of war time are but the modified results of unchanging laws which still obtain in peace time; and that the phenomena of agriculture and "business," so-called, interact, neither set being wholly cause or wholly effect.

At the present time some effort is being made in a study of producers' prices as compared with consumers' prices. Such study furnishes little enough consolation to either producers or consumers, but serves the useful purpose of giving a more correct perspective to the part which farmers' prices play in the present high living costs.

It has seemed best to limit this paper to a commentary on some forces and factors that influence the determining of price levels under peace-time conditions. While war-time prices are a matter of both concern and wonderment, we are after all particularly interested in the price levels which are to obtain in the future, and with the forces and factors which will influence the determining of these price levels. It has, therefore, seemed best to choose a single concrete problem of agricultural prices and follow its lead to the forces which influenced prices before the war; to the modifications which came under war conditions; and to the probabilities in the years to come. For this purpose I have chosen the milk industry of New England. The milk industry furnishes one of the most complex problems of

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price determination. It is also the historic sore spot in dairy sections, and as dairying is after all the basis of New England agriculture, it is the matter of greatest importance in future New England agricultural prosperity. Furthermore, prices of fluid milk in New England are really crystallized in the Boston market and this discussion will for the most part center around Boston market conditions.

Greater Boston, which is a unit in the matter of milk supply, requires twelve to fifteen million quarts of milk monthly. This supply is drawn from five New England states, New York, and to a very slight extent from Canada. Fifty-three percent of the total supply comes from the state of Vermont; twenty-two percent from Maine; thirteen percent from New Hampshire; six percent from Massachusetts and the remaining small balance from Connecticut, New York and Canada. The Vermont territory is, therefore, the largest single factor, with Maine second. Boston is also the market for northern creamery butter and is the point at which price levels of northern creamery butter are related to western creamery butter. The competition of western creamery butter determines the price level of the northern creamery, as the northern cannot carry too large a premium over the western. The price of northern creamery butter strongly influences milk supply conditions in the Boston fluid milk market.

For many years Vermont was essentially a manufacturing rather than a milk shipping state. Butter and cheese factories were scattered through producing sections and were the only outlet for dairy products. These same butter factories, too well built to pass into quick decay and too obsolete to compete with the middle western butter factories, are a part of Vermont's dairy problem at the present time.

When the population of greater Boston grew to the point of demanding more milk than the territory immediately around Boston could supply, the milk buyers went into New Hampshire and Vermont. The producers, unaccustomed to methods of rightly appraising profits, were easily tempted to withdraw milk from the butter factories and sell through Boston contractors, who were in a sense only brokers, buying a supply in the country and forwarding it to the real distributors in the city.

OWNERSHIP BY FARMERS OF FIRST FACILITIES FOR DISTRIBUTION AND MANUFACTURE.

At this point the first large force influencing price levels for dairy products made its appearance; namely, the purchase of producers'

plants by milk distributors from the cities. As the prices offered for dairy products were attractive, butter factories along railroad lines soon found themselves in trouble through diminishing volume, and it was rather an easy matter for milk buyers from Boston to secure control of these factories; particularly easy because the majority of creamery corporations were not organized along strict coöperative lines but were stock companies in which the stock carried the right to vote.

Prices fell as soon as the Boston buyers of milk had succeeded in getting control of local creameries. The only competing market for milk was gone. As individuals, farmers were unable to go to the distant city market and sell their milk effectively. They lacked organization to do collective bargaining. In St. Albans, for instance, just before the war the producers had lost control of local plants and the only condensary purchasing in the area was paying one dollar per hundred pounds for milk, while in the nearby hills butter factories still owned by farmers were paying one dollar and seventy cents per hundred pounds. What happened in St. Albans happened to a greater or lesser degree in all milk supplying territories of New England, and the first step away from economic and marketing independence had been taken by the farmers.

This principle, so simply illustrated in Vermont conditions, is all important in the marketing of agricultural products which must move to distant markets. In those parts of Vermont which have undertaken the correction of the evil much better conditions may be found today. The milk producers of St. Albans reorganized to get back control of the situation and had actually broken ground for a competing plant, when the distributing company saw the handwriting on the wall and sold out their plant to the farmers. This brought back a condition of independence, in that the producers again owned the first facilities of distribution and manufacture.

Genuine coöperative plants are being completed in various parts of the territory at the present time with the result that prices have substantially improved for the producers using them. In the Maine territory the New England Milk Producers' Association has at present undertaken the purchase of the plants of a large independent company and are even undertaking the control of facilities of distribution in the market; whether wisely or unwisely time alone will tell.

The Southern Produce Exchange of Norfolk, Va., by coöperative selling facilities removed the strangle hold of the country buyers. In the Connecticut Valley tobacco growing areas, the coöperatively

owned tobacco warehouse, enabling farmers to sort their own crops and hold them for favorable markets, has already had a distinct influence on the price offered by tobacco buyers; not only to members of the exchange, but also to non-members. The difference between eighteen and thirty cents per pound represents the contrast between prices offered in a territory without coöperative warehousing, and prices offered in the Enfield, Connecticut, territory with a strong coöperative exchange. The California Fruit Growers' Exchange, the United Grain Growers, Limited, and a host of other farmers' corporations have been built upon the principle that until the producer is able to avoid the necessity of taking sacrifice track-side prices for his products, he is not in a position of marketing independence. Since he has not the facilities for storage and for manufacture, or for routing his product to optional markets, he is in a position of dependence upon the whim and mercy of those who dictate track-side prices. The Richmond, Vermont, milk producers were some years ago limited to the price paid by the Borden Company at their station. To-day, their own corporation takes their milk, and is equipped to sell it in whatever market will pay the most, and in whatever form is most in demand; fluid milk, raw or pasteurized, butter, sweet cream, or ice-cream. This plant is one of several in the Vermont territory and the forerunner of many.

Where coöperative ownership of the first facilities of distribution and manufacture is desirable, it becomes necessary to decide what form of farmers' organizations are best suited to this work. The first attempts were by the ordinary stock corporations, organized under the general business law. These were soon replaced by truly coöperative organizations, in which voting was by individuals rather than by stock. Still another type has developed because of the wording of the Clayton Amendment to the Sherman Anti-Trust Law; namely, non-stock, membership corporations. These are financed by the use of the collateral loan note in place of the stock subscription. Each type of organization has its supporters and its advantages for certain industries and locations. One all-important matter to insure, however, is that the organization is so formed that control cannot pass from the hands of producers to the hands of those who buy their product.

Another matter which is coming to the fore in New England at present is the danger of competition between farmers' plants. The original conception of the New England Milk Producers' Association was that each member was a part of a large overhead body and exer-

cised his right to vote in person or by proxy at the annual meeting. The result of this first effort was disastrous and many factors contributed to its failure. Control easily passed into the hands of a few who, however sincere, were not representative of the entire territory and of the entire industry. The meetings of the corporation were attended by but few. The real work of the association was little appreciated by a great number of producers and finally through conflict with statute the association was dissolved and its business liquidated.

The present New England Milk Producers' Association is built upon a local unit composed of milk producers who ship from a common point of origin. Each local in a county sends a representative to a county branch. The presidents of the county branches are the directors of the New England Association. As a result of this, every part of the producing territory is represented in discussion and in vote. The solidity of a producers' organization will depend among other things upon the solidity of its locals and upon the ability of the overhead to furnish marketing facilities so that cut-throat competition between locals is eliminated, as in the case of the California Fruit Growers' Exchange.

Many attempts are made from time to time to organize coöperative exchanges through the creation of a large overhead and the subsequent development of branches. Aside from the United Grain Growers, Limited, the writer is not aware of any large coöperative movement for selling or buying that has not developed through the growth of locals and through subsequent amalgamation into an overhead organization.

BUYERS' MONOPOLY OF SHIPPING FACILITIES.

At this point another factor entered to cause disturbance to the farmers. The buyers from Boston were able to lease cars from the railroad systems and operate them as an effective monopoly. Producers were unable to mobilize enough milk at a shipping point to make possible the operation of their own cars, and were unversed in methods of finding an outlet for their milk if it had been possible to operate such cars. This move on the part of buyers, added to the control of competing markets by buyers, had a most disastrous effect upon prices. It was possible for them to make their offerings as low as they pleased, limited only by the bankruptcy limit of producers. The latter contributed their labor, and depleted their soil without reward, receiving just about enough for their milk to permit sub-

sistence and the payment of the grain bill. This was the blackest hour in the history of New England dairying.

The Massachusetts Legislature attempted to remedy conditions by passing a law which in effect broke the leased car monopoly in the state. Massachusetts producers were thereby enabled to get to the Boston market because of the open car facilities which the law compelled, but reaching Boston they found themselves still in competition with milk produced in Maine, New Hampshire and Vermont and moved in leased cars. This is but an illustration of the futility of attempting to correct regional ills by state effort.

In 1916 the Inter-state Commerce Commission made new tariffs for New England, abolishing the leased car monopoly and placing milk tariffs upon actual mileage travelled regardless of number of roads involved. As a result of this, competition between buyers was actually restored and the market in Boston was open to all producers on equal terms.

Further inequality of tariffs was corrected by the Inter-state Commerce Commission ruling. For instance, it had been possible for milk to move from Dover and Foxcroft in Maine, over two railroad systems, a distance of two hundred and forty miles, into Boston at about one half the cost for moving the same quantity of milk a somewhat less distance from Vergennes, Vermont, also over two railroad systems. It is obvious that before the correction of tariffs, Vermont territory was under a handicap of from one third to one half cent per quart because of this tariff injustice: this being the per quart difference in the rates.

The transportation monopoly as it has existed in New England is suggestive of conditions that still prevail in other branches of agriculture. The supply of heater and refrigerator cars is not adequate, particularly on eastern lines, and the ownership of adequate equipment by certain firms gives these firms distinct advantage over smaller shippers.

Sinister control of car supply in grain shipping territories has been charged for many years past, with the inference that some shippers of grain are penalized because of favoritism and discrimination. The manipulation of car supply, if possible for buyers, may have the distinct effect of depressing the price to producers at the shipping point; at the same time creating a shortage to the consumers in the markets. It may be argued that such temporary shortage of cars with depressed price for a matter of days or weeks will be corrected in another swing of prices. It is, however, quite commonly the expe-

rience of producers that while they are sure to feel the ill effects of an oversupply at the market or shipping point, they are too seldom the group who feel the beneficial results of active demand and short market supply with resultant high prices.

The future ownership and control of railroads is a matter of supreme importance to producers. It is important that an adequate supply of rolling stock should be in existence and that it should be available impartially to all producers. It may well be questioned whether, if the government continues a measure of control over railroads, it should follow the policy of abetting a partial monopoly in the form of privately owned refrigerator cars; whether it should abolish all possibilities of privately owned refrigerator cars, or whether it should create public facilities parallel to private and adequate to all needs. While producers endeavor to guard their interests by adequate transportation facilities, it is necessary for them also to recognize that commodities such as milk are ephemeral in character and the demand for milk is ephemeral. What the consumer does not drink today is not required tomorrow or next day. Other commodities by way of contrast have a seasonal demand, as wheat for milling purposes, and delay of a day or a week in providing transportation facilities does not affect the ultimate consumers' demand for the product. It is essential that farmers insist upon adequate provision for daily movement of commodities that are in daily and ephemeral requirement. It may, on the other hand, be necessary for farmers producing less perishable commodities to overcome the shortage of transportation facilities by building adequate storages for themselves.

A further matter suggested by the discussion of railroad rates is the question of future rail tariff levels. The railroads of the country are not in a happy financial situation and their present condition points to advance in railroad rates. This may be a necessity, but it has the effect of raising prices on all the commodities which the farmer must buy and of further raising prices for his products in the markets or of lowering returns to him, depending on conditions of competition and market demand. Together with this problem of advancing freight rates comes the problem of subsidizing shipping. It is not inconceivable that corn from Argentine may be delivered to feeders in Maine or Georgia cheaper than Iowa corn can be delivered to feeders in Ohio and Indiana. It also means an extra tax on western beef reaching eastern markets; and may prove to be the equivalent of subsidy to Argentine beef. Now, if ever, is the time when representatives of agriculture may affect future price levels by guarding agricultural interests in matters of transportation legislation.

COLLECTIVE BARGAINING

As indicated earlier in the paper, the New England Milk Producers' Association has attempted collective bargaining in time past and has suffered a disastrous failure. With the opening of transportation by the abolition of the leased car, the dairymen undertook a new chapter of organization. The reorganized New England Milk Producers' Association formulated changes in the system of buying, and demanded that prices be based upon delivery in Boston; that they should be uniform for points equi-distant from Boston; and that prices paid at various railroad stations should diminish directly in proportion to the cost of moving the milk from the shipping point into Boston. A strike was called to coerce such dealers as were unwilling to agree to this and in the fall of 1916, beginning with the installation of the new tariff rates dated October 1, the entire system of milk buying was changed to this basis. In this new attempt at collective bargaining the New England Milk Producers' Association was wholly successful.

During the period of the war the Federal Milk Commission for New England found it necessary to deal directly with some body of farmers, and the New England Milk Producers' Association served as this body. The war emergency, therefore, enabled the producers to achieve a solidarity which would hardly have been possible under peace conditions; as the findings of the commission applied only to producers who were members of the organization.

At this point a distinction should be made. Collective bargaining as we understand it does not necessarily involve the physical handling of the product. In too many cases it designates arbitrary or coercive demand. Coöperative selling as we understand it implies physical handling of the product and the performance, by the farmers' corporation, of some of the functions of distribution. Utility is added in some form or other to the product. Coöperative selling may well be understood to include collective bargaining, but is a larger function than collective bargaining as the term is generally understood. The present status in the New England territory is anomalous. The New England Milk Producers' Association, controlling the milk of perhaps twenty thousand producers, bargains with the large distributors of Boston and because it is a virtual monopoly, these distributors are obliged to purchase from the Association. At the same time, the New England Milk Producers' Association has recently acquired control of the Turner Center Dairying Company with country facilities and with a large wholesale city plant. This organization is, therefore, competing with its customers; a con-

dition which has not proven to be sound in other lines of business. Furthermore, recent investigation shows that the Turner Center city plant, now controlled by the producers, has been cutting the wholesale price of milk to can purchasers, such as hotels and restaurants; and is virtually compelling the acceptance of similar business by other large corporations at a loss. In a measure the same condition has obtained in Portland, a strike having been declared against some of the distributors supplied by the Association, with the virtual capturing of trade by the Association through its local distributing facilities.

It should be stated that the New England Milk Producers' Association has at no time consciously attempted to set unfair prices upon its product. It has always avowed its intention to ask for no more than cost of production plus a reasonable profit. Further comment will be made upon this in the paragraph on "Price Fixing."

At the present time labor and agriculture are under joint suspicion in the public mind because both enjoy a common exemption in the Clayton Amendment to the Anti-Trust Law. The overreaching demand of labor in matters of collective bargaining has caused public revulsion. Agriculture will do well to watch this development in public opinion. Already both state and national legislative powers are considering further curbing of labor in the matter of the monopoly exercise of collective bargaining. It is not at all impossible that the unpopular program of collective bargaining by labor may react very unfavorably on the public mind in connection with agriculture and may even lead to the annulment of the present exemption. Furthermore, if agriculture follows the present lead of labor in extreme demand, there can be little question as to the final outcome.

The argument has been raised that the Clayton Amendment constitutes class legislation for employees (laborers) and farmers who secure special exemption and that, therefore, the law is pernicious. We must not lose sight of the fact that employers of labor, sellers of farm supplies, and buyers of farm products can easily make clandestine agreements; while laborers and farmers cannot. The effect of the present law is to legalize for farmers and laborers that which the rest of society can and does accomplish in secret. It removes from farmers and laborers the disability which must surely rest upon them if agreements in matters of trade are to be made unlawful.

PRICE FIXING.

During the period of the war milk prices in Boston were determined by a Federal Commission of the United State Food Administration. In May, 1917, the Massachusetts Food Administration furnished

funds for a survey of the cost of milk production in the state. This work was extended by corresponding surveys in Maine, New Hampshire, Vermont and Connecticut; and the work was undertaken jointly by the Agricultural College specialists and the Boston Chamber of Commerce. The results of this survey were published by the Chamber of Commerce and were available for the work of the Commission.

The difficulties in the way of determining cost of production have been so much debated that further discussion hardly seems necessary. Suffice it to say, however, that only with the greatest difficulty did the Milk Commission agree upon prices that were considered fair by all members of the Commission. In fact, nearly every verdict was recorded with one vote (that of the Labor representative) dissenting. It is significant, however, that after the announcement of the findings of the Commission the public accepted what at first seemed a preposterous price and made little or no complaint. The same is true at the present time. The Massachusetts Commission on the Necessaries of Life has just approved the highest price ever paid for milk, yet up to the time of leaving, last Friday, November 7, not a complaint from consumers had been received. Price fixing, however fallacious or wrongful, has had the virtue of reassuring the public so that consumers do not feel themselves victimized.

The Federal Milk Commission had hardly begun its work before it was confronted with the problem of surplus milk. A surplus plan was worked out by which distributors accepted all milk offered and manufactured the surplus not used in direct consumption as fluid milk, making returns to producers for such portion on basis of the manufactured product. This surplus plan has been in effect more than a year and while not wholly satisfactory, it has been a fairly successful attempt to place the losses occasioned by surplus at the door of those who produce the surplus. Another matter which seriously hampered the work of the Commission was price-cutting. Various small distributors furnishing an inferior grade of milk or handling it by less careful methods were able to sell below the Commission's fair price. Consumers were quite naturally inclined to wonder how some dealers could sell for less money than others. Small distributors cut prices in all classes of trade. Large dealers cut prices in the wholesale or can trade and assessed these losses on the household trade, which was less able to carry them.

An illustration of the effect of arbitrary price fixing on the dairy market is found in the sudden and violent depression of butter prices in January, 1919. Going back in history, the Food Administration,

in the late summer of 1918, urged farmers to accept a relatively lower guaranteed price for butter than market prices then obtaining; arguing that if the market were allowed to run riot it would cause a decrease in demand and fall of its own weight. The farmers' representatives in Washington preferred to take their chances with the future market and the predictions of the Food Administration proved erroneous. In January, 1919, the press carried a report that large quantities of New Zealand butter were available. Dealers were at the same time informed that stocks which they had been holding for the government were released. Butter prices fell from \$.67 to \$.48 per lb. The conditions, however, were fictitious; in fact the market immediately climbed back; the government still held under its control the requisitioned stocks and the New Zealand butter did not come in with sufficient volume to break the market. Fiat abrogation of the equation of supply and demand was not a success, but it cost the New England farmers hundreds of thousands of dollars.

If any further evidence is necessary of the power of the government to manipulate prices, or of the intent of the government to manipulate prices, note the following quotation from the President's Message to Congress on the high cost of living as contained in the Congressional Record of August 8, 1919:

Wheat shipments and credits which facilitate purchase of our wheat can and will be limited and controlled in such a way as not to raise but rather to lower price of flour, which the government has the power, within certain limits to regulate. . . . The price of wheat is lower in the United States than in Europe and can with proper management be kept so.

COMPETITION BY AGRICULTURAL BANKRUPTS.

In no other productive industry is it possible for price levels to be so seriously influenced by bankrupts as in agriculture. The manufacturer of shirts who is unable to meet drafts for material and unable to meet his payroll must forthwith cease producing. In agriculture the producer pays but a small part of his material cost in the form of cash for seed, fertilizer and feed. His principal outlay is for labor. By paying himself little or no wages and by using the unpaid labor of his family, at the same time depleting his soil fertility, many a farmer is enabled to continue production although virtually insolvent. The product of such agriculture is always obtained at abnormally high cost, and the producer fails to realize how great this cost really is. The product is usually sold at much less than even a normal cost. Throughout the New England section many small milk

markets are all but ruined by the competition of agricultural bankrupts who have come into the market with a blare of trumpets announcing that milk can be produced at less than the accustomed price, and offering to sell at corresponding cut rates. The usual fate of such reformers is commercial extinction, but in the process of extinction they cause general havoc to the producers who are on a sound enough basis to continue in business. One of the very real problems of price determining is the elimination of such agricultural bankrupts from the field of competition. Not that we have hope of ever accomplishing it entirely or accomplishing any part of it speedily; it is a subject for careful thought and continuous educational labor. Not only do such men harm the market by selling for less than a fair market price; there is always an added danger through the demand that their production costs be included in studies which are the basis of price demands.

As one who has been for more than two years associated with governmental agencies that have done actual price-fixing, may I here record the conviction that the arbitrary fixing of prices for agricultural products is fraught with the greatest danger; even if such price-fixing is by the mutual consent of the parties concerned, and avowedly on the principle of costs of production. The fixing of milk prices in New England territory probably saved the dairy industry in war time, and did no one injustice. It has, nevertheless, left the industry out of economic balance. I am convinced that the accurate determination of costs is impossible, in that no man or body of men can determine the margin of the group of producers necessary to supply the market, and costs used as a basis of price-fixing must be marginal costs. Only the interplay of supply and demand can determine how many men, and which men, are necessary. If costs are fixed at a fictitiously high level, too many new marginal producers will come into the fluid milk market and the losses on surplus will nullify the apparent gains. If consumers' prejudice predominates, the present marginal group will be driven out, and a shortage will lead to restoration of still higher prices. It will be a healthy thing for agriculture when these unsound efforts are abandoned.

At the same time I wish to go on record as endorsing more and better studies of production costs for educational purposes. Knowledge by farmers of the facts concerning the causes of the profits and losses will do much toward a healthy relation to market problems and to price levels. Some will lack courage to act on the facts, and will

continue to produce without profit or even at a loss. Many more will either withdraw from unprofitable lines, or will consistently strive to improve methods and turn losses into gains. Only by such process, and by improved systems of marketing, can real progress be made. Monopoly for price coercion is a peril; arbitrary price-fixing by governmental authorities is a delusion. The war experience has had its value, but only as indicating weaknesses, on the one hand; and on the other showing directions in which development must be made.

FARM MANAGEMENT EXTENSION WORK.

The farm accounting schools were the outstanding feature of the farm management extension work in the northern and western states this past winter. The plan of the schools was to have each farmer present work out the same sample farm record in the simple farm account book as a means of learning how to keep, summarize and study his own financial record. The advantage of this method of teaching the importance of farm accounting is well illustrated in the following quotation taken from a report of one of the farm management demonstrators:

"By working out the record in one of the account books, as we do in the farm accounting school, every man and woman in attendance is thoroughly acquainted with how each figure is obtained. Each step taken in working out the record is explained so that everyone thoroughly understands it. They are then able to go home and work out the record for their own farm business, using the one that they made out in the school for reference. From our experience in holding these schools we have arrived at the following table: People composing a general farm audience will remember $\frac{1}{10}$ of what they hear, $\frac{3}{10}$ of what they see, $\frac{5}{10}$ of what they hear and see, $\frac{7}{10}$ of what they say, and $\frac{9}{10}$ of what they do. Therefore, we believe in the latter method, or in having the people do for themselves the thing we want them to remember."

These schools have been quite extensively conducted in at least fifteen states this year. Generally the farm record that is worked out in the farm accounting school is used as the basis for discussing the factors determining successful farm management, bringing out the importance of such factors as the crop yields, distribution of capital, quality of livestock, size of business, layout of the farm, and efficiency in the use of man and horse labor.

H. C. M. CASE.

OFFICE OF FARM MANAGEMENT,
WASHINGTON, D. C.